Application

For

United States Utility Patent

SPECIFICATION

TO WHOM IT MAY CONCERN:-

BE IT KNOWN, THAT WE, Perry Robichaud, residing at 4827 Hwy 69 N, Val Therese, Ontario, P3P 1S7, Canada, and **Ron Dubreuil**, citizens of Canada respectively, have invented or discovered certain new and useful improvements in:-

FOOT OPERATED FISHING NET TIPPER

of which the following is a specification.

TITLE OF THE INVENTION

FOOT OPERATED FISHING NET TIPPER

FIELD OF THE INVENTION

The present invention relates to a foot operated fishing net tipping apparatus releasably attached to a fishing boat comprising: a boat-attaching portion, a net-holding portion, a lock portion, a foot pedal portion and connecting members. A fisherman can raise and lower a fishing net with one foot, thereby freeing both hands for the fishing rod.

BACKGROUND OF THE INVENTION

In fishing, especially from a conventional fishing boat, it is common for fishermen to help one another in bringing a caught fish into the boat by having one person handle the fishing line and another person using a net to secure the catch. On a good day fishing, when two fishermen have a fish on, it becomes virtually impossible to help each other in the above fashion.

It became apparent to the inventor to devise an apparatus that would use one's foot to operate a fishing net from a conventional fishing boat.

Prior art teaches of no such apparatus that enables a boat fisherman to operate a fishing net with a foot pedal.

SUMMARY OF THE INVENTION

It is thus the object of the present invention to provide boat fishermen with a foot operated fishing net tipper designed to free a fisherman's hands while reeling in his/her catch.

In one aspect of the invention, the boat-attaching portion may be fixedly attached to a boat's upper edge.

In another aspect of the invention, the boat-attaching portion may incorporate a clamp-type device to releasably secure said boat-attaching portion.

Accordingly, the foot-operated fishing net tipper of the present invention allows a fisherman to operate a fishing net by foot while manipulating a fishing rod with both hands.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other advantages of the invention will become apparent upon reading the following brief description and upon referring to the drawings in which:-

FIGURE 1 is a perspective view of the foot operated fishing net tipper of the present invention shown attached to a boat's side.

FIGURE 2 is a cross-sectional view taken from Figure 1 of the boat-attaching portion of the foot operated fishing net tipper of the present invention shown clamped to a boat's side.

FIGURE 3 is a cross-sectional view taken from Figure 1 of the boat-attaching portion of the foot operated fishing net tipper of the present invention shown unclamped from a boat's side.

FIGURE 4 is a cross-sectional view taken from Figure 1 of the locking latch portion of the foot operated fishing net tipper of the present invention shown with the latch engaged.

FIGURE 5 is a cross-sectional view taken from Figure 1 of the locking latch portion of the foot operated fishing net tipper of the present invention shown with the latch disengaged.

FIGURE 6 is a cross-sectional view taken from Figure 8 of the net holding portion of the foot operated fishing net tipper of the present invention shown in a net securing position.

FIGURE 7 is a cross-sectional view taken from Figure 8 of the net holding portion of the foot operated fishing net tipper of the present invention shown in an opened position.

FIGURE 8 is a right-side elevation view of the foot operated fishing net tipper of the present invention shown attached to a boat and holding a net in a raised position.

FIGURE 9 is a right-side elevation view of the foot operated fishing net tipper of the present invention shown attached to a boat and holding a net in a lowered position.

FIGURE 10 is a perspective view of an alternate embodiment of the boat attaching portion of the foot operated fishing net tipper of the present invention shown attached to a boat's side.

While the invention is described in conjunction with preferred illustrated embodiments, it will be understood that it is not intended to limit the invention to such embodiments. On the contrary, it is intended to cover all alternatives, modifications and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

In the following description, similar features in the drawings have been given similar reference numerals.

Turning to the drawings, in particular, Figure 1, which illustrates a perspective view of the foot operated fishing net tipper of the present invention comprising: a boat-attaching portion 2 with each half being a mirror image of the other having a generally planar member 6, an outer bracket 5, an inner bracket 9, an outer clamp 3 adapted with a channel 4 to slide in a mating channel within the outer bracket 5, and inner clamp 7 also having a channel 8 adapted to slide unidirectionallly in a mating channel within the inner bracket 9, a ratchet mechanism adapted with a hinged member 11 hinged to the planar member 6 within an opening 16 where said hinge member 11 is adapted with a plurality of teeth mating with a reversed pattern of teeth atop the channel 8 of the inner clamp 7, a pair of upwardly projecting plates 70 integrally attached to the planar member 6 thereby forming two raised fins above said planar member 6 through which a horizontal reinforced perforation 31 is provided to rotably engage an axle 30 holding the net holding portion 20, a net-holding portion 20 having a lower 21 and an upper 22 hemi-cylindrical half forming a generally hollow tubular member, said lower half 21 is fixedly attached to an axle housing member 28 through which an axle 30 passes, and also adapted with a hinge 25 and latch pins 24, the upper half 22 of the net holding portion 20 is adapted with a mating hinge 25, latches 23 having a opening through which the latch pins 24 of the lower half of the net holding portion 20 frictionally engage, a turn bolt having a knob 27 and a threaded stem protruding a similarly threaded opening at the very top of the upper half 22 of the net holding portion 20, a strike 13 located on the lower rearmost surface of the lower half of the net holding portion 20 having a rearward hook portion and a horizontal perforation a lock portion having a pivoting latch 35 and a lever 37 fixedly attached to an axle housing so as to

rotably with connecting members 62 and 63 where said connecting members 62 and 63 form an axle upon which the locking latch assembly rotates, connecting members 60 including rear stabilizer struts 62 & 63 and a center transmission arm 61, and a foot pedal assembly 40 having a curved toe portion 41, a planar heel portion 42 joined by vertically planar joining members 43 to which upwardly protruding tongues 50 are integrally attached, a pedal having an arm 46 and axle housing 45 and a planar pad 47 and an upwardly protruding tongue 51all integrally attached to said arm 46 by an axle 52 traversing perforations at each joining member 50.

Turning now to Figure 2, a cross sectional view taken from Figure 1 of the boat-attaching portion 2 of the foot operated fishing net tipper of the present invention illustrating a partial section of a boat's side adapted with the boat-attaching portion 2 comprising: an outer clamp 3 slidably connected to the outer channel portion 5 of the planar base 6 where a widened member 76 contacts the outer surface of the boat's side 38 just under the boat's upper lip 39, and an inner clamp portion 7 ratchetedly attached to the inner channel member 9 of the planar base 6.

Turning now to Figure 4, further illustrating the ratchet mechanism comprising: an inner clamp member 7 slidably engaged within a channel 9 fixedly attached to a planar base 6, and a hinged ratchet latch 18 floating above a mating ratchet surface 17 thereby promoting a solid grip between the ratcheted lower clamp surface and the similarly ratcheted surface 12 of the hinged ratchet latch 18. The connection can be disengaged by squeezing the handle 11 and 10 together thereby lifting the hinged ratchet latch 18 away from the ratcheted upper surface of the inner clamp member 7.

In reference now again to Figures 2, it can be further understood how when the inner clamp member is pushed outwardly against the inner surface of the boat's side with the lower grip

14 while pulling the planar surface 6 inwardly with the upper grip 15, a clamp-like pressure is exerted on both inner and outer surfaces of the boat's side.

Turning now to Figures 3, illustrating the initial set-up of the boat-attaching portion2. The inner clamp member 7 is then inserted within an inner channel within the channel member 9 to engage the ratchet latch.

Turning to Figure 5, a cross-sectional view of the ratchet latch assembly in a disengaged position illustrating the freedom granted to the inner clamp member 7 thus allowing said member to be retracted inwardly away from the boat-attaching portion 2 of the present invention.

Referring now to Figure 6, a cross-sectional view taken from Figure 8, illustrating the net holding portion 20 having a lower 21 and an upper 22 hemi-cylindrical half forming a generally hollow tubular member, said lower half 21 is fixedly attached to an axle housing member 28 through which an axle 30 passes, and also adapted with a hinge 25 and latch pins 24, the upper half 22 of the net holding portion 20 is adapted with a mating hinge 25, latches 23 having a opening through which the latch pins 24 of the lower half of the net holding portion 20 frictionally engage, a turn bolt having a knob 27 and a threaded stem protruding a similarly threaded opening at the very top of the upper half 22 of the net holding portion 20. A net handle 80 may be placed within the hollow cylindrical form by latching the upper latch 23 with the lower latch 24 and tightening the bolt 29 fixedly attached to a knob 27 threaded to a reinforced portion 26 of the upper half 22 of the net attaching portion 20.

Figure 7, also a cross-sectional view net holding portion 20 in a collapsed position illustrating the release of a quick release latch 23 from the latch 24 of the lower half of the net holding portion 20. When a fish is captured in the net 80, the fisherman's hands are now freed to quickly manipulate the net 80. Removing the net is accomplished quickly by pulling the upper

latches 23 upwardly, releasing said latches from the lower latches 24 thereby allowing rotation of the upper half 21 of the net holding portion 20thus freeing said net 80.

Turning now to Figures 8 & 9, a right side elevation of the foot operated fishing net tipper of the present invention further illustrating the connecting members 61 & 63 and the pedal assembly 40 where two vertical struts 63 are formed of a rigid material such as steel and adapted to pivotally engage to grips 79 at the top portion of the planar base 6 and similarly to perforations 44 within the tongues at the top portion of the pedal joining members 43, and a transmission strut 61 is similarly engaged to a strike 13 at the lower rearmost surface of the lower half 21 of the net holding portion 20 and to a perforation in a tongue 51 on the upper edge of the pedal member 46. It can be observed that when downward pressure is applied atop the pad 47 of the pedal member 46, the transmission strut thereby transfers this action to the net strike 13, which in turn rotates the net holding portion toward the inner side of the boat thereby tipping up the outer end of said net holding portion 20. Furthermore, when the net in raise, a locking assembly engages a latch 35 to a strike 13 which holds the net 80 in an upright position. To lower the net back in the water 90, the fisherman simply depresses a lever 37 integrally attached and pivotally engaged to the vertical struts 62 & 63 thus releasing the net holding portion 20 and net gravitationally.

Turning now to Figure 10, a alternative embodiment of the boat attaching portion of the foot operated fishing net tipper of the present invention where the same tipping features are preserved when using a screw-on base 6 without clamps for those boats with a wide upper edge 39. this base 6 is fastened to the boat's upper edge 39 by means of screws 90.